CHEYENNE MOUNTAIN

Relevant, Enduring, and Vigilant

Cheyenne Mountain AFS stands ready to support national strategic defense missions.

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When people find out we work at Cheyenne Mountain AFS, Colo., we invariably get asked either, "Don't you mean NORAD?" or "Isn't that place closed?" The answer to both questions is "No."

On May 12, 2008, NORAD's primary operations center officially moved to Peterson AFB, Colo., to collocate with NORTHCOM for joint operations. Since many identified Cheyenne Mountain AFS (CMAFS) only with NORAD, the rumors of our closure began to abound in earnest, not only in the public, but also throughout the Colorado Springs military complex. We are still dealing with the ramifications of this move today and have encountered some interesting challenges from a civil engineering perspective.

So if NORAD moved out, what exactly is CMAFS today? Well, it is the only STRATCOM-certified, high-altitude electromagnetic pulse-hardened command, control, communications, computers, intelligence, surveillance and reconnaissance facility in the world. It is a complex of facilities of over five acres with collective chemical, biological, and radiological protection, 99.999% reliable infrastructure, and design features that make it survivable across a spectrum of threats. In short, CMAFS is valuable real estate, attractive to a host of missions throughout DOD.

Following NORAD's move to Peterson AFB, our primary challenge was reconfiguring internal facilities to take care of a host of new missions knocking on the door. Currently, CMAFS houses elements of Strategic Command, the Air Force Technical Applications Center, and the Defense Intelligence Agency's Western CONUS Regional Service Center. While NORAD moved primary operations off-base, CMAFS still serves as the location for NORAD-NORTHCOM continuity of operations, alternate command center, and qualification training functions. The 721st Mission Support Group's Test Control Division and Systems Center are also still maintaining the nation's Integrated Tactical Warning and Attack Assessment System that analyzes sensor inputs from around the globe.

If the above set of missions isn't enough, CMAFS has several beddown requests in the works. Today, the 721st Civil Engineer Division's primary focus is space optimization. Projects to expand the complex's footprint won't happen quickly enough to address our short-term needs, so right now our only option is more efficient space usage with existing facilities.

This optimization effort is split into two areas. First, we are undergoing a full evaluation of all missions within the complex. From a mission standpoint, the underground facility space is too valuable to use for functions that don't require such a high level of protection and can easily be relocated to space above ground (primarily mission support and administrative functions). For those mission functions that truly require the benefits of space inside the complex, we are developing projects to maximize usage by further reconfiguring our facilities in accordance with current space standards.

Maximizing the space available for missions inside the complex addresses only half the challenge. The other part of our effort focuses on optimizing use of a single 32-acre parcel of aboveground land available to us. We are currently undergoing a community planning effort to optimize use of this land to ensure we can provide the mission support facilities that do not belong inside the mountain. These two space optimization efforts, and the resulting projects, will culminate in the final CMAFS 2050 vision — charting a course for maximizing the effectiveness of our installation regardless of the missions we are called upon to support.

Infrastructure modernization — a challenge for all installations — is especially important at CMAFS, where we are

Entrance to Cheyenne Mountain AFS, Colo. (photo by Mr. Paul Shambroom, used with permission)

mandated to maintain 99.999% reliability for mission critical infrastructure. As another "twist" on this challenge, all of our facilities are operating off common support, including a chiller plant, condenser water loop and cooling towers, uninterruptible power supply system, and a generator plant. So not only are outages unacceptable, but any work done to one part of the system has the potential to impact all of the missions we support in the complex. This translates into careful consideration and planning before any work is accomplished on major system components and — of course —associated cost increases.

Challenges yes, but it is an exciting time to work in civil engineering at "the mountain." We are installing a new hoist to bring larger equipment onto the facility roofs, and the rock we are chipping out to make room for the equipment is the first addition of any significant volume to the complex since 1966. We are working with two combatant commands and multiple partner agencies to align emergency management plans and improve our ability to perform button-up operations with the blast doors closed. We are bringing on new first responder capabilities for the fire department to deal with tunnel collapse and other rescue requirements unique to an underground facility.

Is CMAFS closing? On the contrary, today we are postured better than ever before to support national strategic defense missions in the U.S.'s premier underground facility. While designed to address Cold War threats, continuous improvements have ensured our effectiveness across the entire spectrum of threats, and allowed us to maintain our relevance in today's defense environment. The 721st Civil Engineer Division is proud to support "America's Fortress" — Cheyenne Mountain AFS.

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